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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/804,672	03/09/2001	David Reed	007.0156.01	3714

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EXAMINER

LEWIS, CHERYL RENE A

ART UNIT PAPER NUMBER

2177

DATE MAILED: 05/21/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/804,672

Applicant(s)

REED, DAVID

Examiner

Cheryl Lewis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

RESPONSE TO AMENDMENT

1. This Office Action is in response to the applicant's amendment received on March 5, 2004, paper no. 9.
2. Applicant has cancelled claims 1-28 and have introduced new claims 29-56, Amendment A received on March 5, 2004, paper no. 9.
3. Claims 29-56 are presented for examination.
4. Applicant's arguments with respect to claims 29-56 have been considered but are moot in view of the new grounds of rejection.

RESPONSE TO REMARKS

5. On pages 10-15 of the applicant's remarks, the applicant has (1) presented a summary of the Claim Rejections - 35 USC § 103 to claims 1-28 that was presented in the prior Office Action mailed on December 3, 2003, paper no. 8; and (2) the applicant provides an introduction and arguments for new claims 29, 30-42, and 44-56. The arguments for these claims are primarily based on references cited in the prior Office Action mailed on December 3, 2003, paper no. 8. The references cited in the applicant's arguments are Cohen et al. (Pat. No. 5,903,898), Jammes et al. (Pat. No. 6,484,149 B1), Yakota et al. (Pat. No. 5,592,660) and Zaiken et al. (Pat. No. 5,907,848).

However, the applicant has cancelled claims 1-28 and the Claim Rejections - 35 USC § 103 for claims 1-28 was based on references Cohen, Jammes, Yakota, and

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Zaiken. Therefore, new cited claims 29-56 comprise new claim limitations, thus the new claim rejection presented below no longer relies on the cited Claim Rejections - 35 USC § 103 to claims 1-28 that was presented in the prior Office Action mailed on December 3, 2003, paper no. 8.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 29, 30, 35, 43, 44, and 49 are rejected under 35 U.S.C. 102(b) as being anticipated by Tada et al. (Pat. No. 5,544,359 filed March 2, 1994, hereinafter Tada).

8. Regarding Claims 29 and 43, Tada teaches an apparatus and method for classifying and acquiring log data by updating and storing log data.

The method and associated system for classifying and acquiring log data by updating and storing log data as taught or suggested by Tada includes:

based on a log (col. 5, lines 9-39 and 52-66, figure 1, elements 318a and 318b) that is associated with a first database (figure 1, element 319a, col. 5, lines 9-39 and 52-66, col. 8, lines 4-34 and 42-67, col. 12, lines 7-46 and 53-67), identifying first data (figures 1 and 2 'First Classification', col. 5, line 14-16 and 28-32, col. 6, lines 10-15, col. 12, lines 7-52); generating second data (figures 1 and 2 'Second Classification', col. 5, line 14-16 and 28-32, col. 6, lines 10-15, col. 12, lines 7-46 and 53-67) based on a first

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data (col. 5, line 14-16 and 28-32, col. 6, lines 10-15, col. 12, lines 7-52); and sending second data to a second database (col. 5, lines 28-39, col. 8, lines 30-39, figure 1, element 319b, col. 5, lines 9-39 and 52-66, col. 8, lines 4-34 and 42-67, col. 12, lines 7-46 and 53-67).

9. Regarding Claims 30 and 44, Tada teaches monitoring a log that is associated with a first database (col. 5, lines 9-39 and 52-66, col. 8, lines 4-34 and 42-67, col. 12, lines 7-46 and 53-67); identifying a change to a log (col. 8, lines 49-67, col. 9, lines 1-5); in response to identifying a change to a log (col. 8, lines 49-67, col. 9, lines 1-5), identifying a first data (col. 5, line 14-16 and 28-32, col. 6, lines 10-15, col. 12, lines 7-52).

10. Regarding Claims 35 and 49, Tada teaches generating second data based on both a first data and third data (col. 14, lines 18-51).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 31, 33, 36, 39, 40, 42, 45, 47, 50, 53, 54, and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tada et al. (Pat. No. 5,544,359 filed March 2, 1994, hereinafter Tada) as applied to claims 29 and 43 above, and further in view of Cohen et al. (Pat. No. 5,903,898 filed June 4, 1996, hereinafter Cohen).

13. Regarding Claims 31, 42, 45, 50, and 56, the limitations of these claims have been noted in the rejection above. In addition, Tada does not expressly teach a selection criteria.

Cohen teaches a selection criteria (col. 5, lines 17-32, col. 7, lines 30-53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Tada's method of updating database data with Cohen's method of updating database data because Cohen's method could enable the database data of Tada to comprise data manipulation statements, wherein the data manipulation statements can be used to specify database operations, the data manipulation statements are used to perform database query operations which performs changes/updates to the data in a database, and data manipulation statements comprise object statements, where object statements define, drop, and alter the structure of database objects (col. 6, lines 13-21).

14. Regarding Claims 33 and 47, Cohen teaches the means of in response to receiving a notification of a change to third data modifying one or more selection criteria based on a change to the third data (col. 6, lines 44-67, col. 7, lines 35-65).

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15. Regarding Claims 36 and 59, Cohen teaches a rule set that includes one or more criteria for identifying data based on a log (col. 7, lines 35-53).

16. Regarding Claims 39 and 53, the limitations of these claims has been noted in the rejection above. In addition, Cohen teaches data in cache (col. 5, lines 33-45).

17. Regarding Claims 40 and 54, Cohen teaches one or more log entries from a log (col. 5, lines 18-32 and 45-67); retrieving from cache at least one log entry of the one or more log entries (col. 5, lines 18-32 and 45-67); and based on the at least one log entry (col. 5, lines 33-45), identifying data (col. 5, lines 10-15).

18. Claims 32, 37, 46, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tada et al. (Pat. No. 5,544,359 filed March 2, 1994, hereinafter Tada) and Cohen et al. (Pat. No. 5,903,898 filed June 4, 1996, hereinafter Cohen) as applied to claims 29 and 43 above, and further in view of Dovich et al. (Pat. No. 6,308,168 B1 filed February 9, 1999, hereinafter Dovich).

19. Regarding Claims 32 and 46, Tada teaches a rule set (col. 12, lines 24-47)

Cohen teaches a rule set (col. 2, lines 47-57).

Tada and Cohen do not expressly teach metadata.

Dovich teaches metadata (Abstract, lines 1-11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the database methods of Tada and Cohen with the database method of Dovich because Dovich's method could enable the database methods of Tada and Cohen to comprise a metadata module, wherein the metadata module enhances technical information about operational databases and transforms

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operational data to produce the data stored in database tables in a more organized set allowing a user to configure the presentation of information of a database system (col. 1, lines 37-55).

20. Regarding Claims 37 and 51, Tada teaches the metadata includes at least one particular type of data selected from a database architecture data (col. 6, lines 17-53).

21. Claims 34 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tada et al. (Pat. No. 5,544,359 filed March 2, 1994, hereinafter Tada) and Cohen et al. (Pat. No. 5,903,898 filed June 4, 1996, hereinafter Cohen) as applied to claims 29 and 43 above, and further in view of Miller, Jr. et al. (Pat. No. 6,446,074 B1 filed March 20, 2000, hereinafter Miller).

22. Regarding Claims 34 and 48, Tada and Cohen do not expressly teach a database builder.

Miller teaches a database builder (Abstract, lines 1-6) in response to input from a user (Abstract, lines 1-6, col. 3, lines 34-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the database methods of Tada and Cohen with the database method of Miller because Miller's method could enable the database methods of Tada and Cohen to comprise a database builder, wherein the database builder provides a scheme of a database system to define, build, and maintain database files of a plurality of databases that are stored in memory, the memory provides accessing the plurality of stored databases and providing a technical relationship among the data of the plurality of stored databases stored in memory (col. 1, lines 45).

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23. Claims 38 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tada et al. (Pat. No. 5,544,359 filed March 2, 1994, hereinafter Tada) as applied to claims 29 and 43 above, and further in view of Veldhuisen (Pat. No. 6,480,850 B1 filed October 1, 1999).

24. Regarding Claims 38 and 52, Tada teaches information data (col. 5, lines 59-67, col. 6, lines 1-9) and the means which essentially comprise the same means as production data (col. 5, lines 59-67, col. 6, lines 1-9).

However, Tada does not expressly teach a database consisting of a data warehouse and a datamart.

Veldhuisen teaches a data warehouse (figures 2A and 2B, col. 3, lines 53-55) and a datamart (figures 2A and 2B, col. 3, lines 53-55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the database method of Tada with the database management method of Veldhuisen because Veldhuisen's method could enable the database method of Tada to comprise a data warehouse, wherein the data warehouse provides the database with an efficient and consistent management scheme to store, retrieve, and analyze large amounts of data stored in one or more database tables that are dependent on a datamart module, the datamart module containing an audit and replication report on the functionality and any structured changes in the stored data (col. 1, lines 50-62).

25. Claims 41 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tada et al. (Pat. No. 5,544,359 filed March 2, 1994, hereinafter Tada) as applied to

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claims 29 and 43 above, and further in view of Doherty et al. (Pat. No. 5,991,772 filed October 31, 1997, hereinafter Doherty) and Cohen et al. (Pat. No. 5,903,898 filed June 4, 1996, hereinafter Cohen).

26. Regarding Claims 41 and 55, Tada teaches a second database is an informational database (figure 1, element 319b, col. 5, lines 9-39 and 52-66, col. 8, lines 4-34 and 42-67, col. 12, lines 7-46 and 53-67).

However, Tada does not expressly teach a first database is a production database.

Doherty teaches a first database is a production database (col. 4, lines 12-23) and production data (col. 4, line 45-54).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the database method of Tada with the database method of Doherty because Doherty's database method could enable the database method of Tada to comprise a production database, wherein the production database restores system data to a database using backup files, the restoring provides the system database name and the names of any tablespaces at a specific point in time that the database is to be restored (col. 2, lines 5-20).

Doherty does not expressly teach a log entry in a log.

The limitations of these claims has been noted in the rejection above. In addition, Cohen teaches a log entry in a log (col. 5, lines 18-32 and 45-67); a log entry with a change (col. 9, lines 8-26); a log entry includes undo information (col. 6, lines 1-

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11); a record includes informational data (col. 5, lines 60-63) and the means which essentially comprise the same means as production data (col. 2, lines 55-60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the database method of Doherty with the database method of Cohen because Cohen's database method could enable the database method of Doherty to comprise data manipulation statements, wherein the data manipulation statements can be used to specify database operations, the data manipulation statements are used to perform database query operations which performs changes/updates to the data in a database, and data manipulation statements comprise object statements, where object statements define, drop, and alter the structure of database objects (col. 6, lines 13-21).

27. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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NAME OF CONTACT

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Lewis whose telephone number is (703) 305-8750. The examiner can normally be reached on 6:30-3:00.

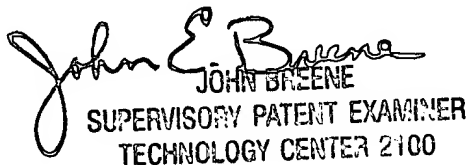
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (703) 305-9790. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

(703) 746-5651 (Use this FAX #, only after approval by Examiner, for "INFORMAL" or "DRAFT" communication. Examiners may request that a formal paper/amendment be faxed directly to them on occasions.).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



Cheryl Lewis
Patent Examiner
May 17, 2004



JOHN BREENE
SUPERVISORY PATENT EXAMINER
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